

18
CLAIMS

What is claimed is:

1. A method for operating a mobile station in cooperation with a network operator, comprising:

upon an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, determining if a location procedure is ongoing in the mobile station; and

if it is, completing the location procedure and reporting measurement results in a message from the mobile station to a target radio network controller.
2. A method as in claim 1, wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation.
3. A method as in claim 1, wherein the location procedure is executed during a Combined Cell/URA/GRA Update and SRNS Relocation procedure for a PS domain, and applies to both intra-SGSN SRNS relocation and for inter-SGSN SRNS relocation
4. A method as in claim 1, further comprising sending LCS parameters from a source RNC/BSC to a target RNC/BSC.
5. A method as in claim 4, wherein the LCS parameters are sent in a transparent manner.
6. A method as in claim 4, wherein for a UTRAN case the LCS parameters are sent in a Source RNC to Target RNC Transparent Container in a Relocation Required message.
7. A method as in claim 1, further comprising sending LCS parameters from a source RNC/BSC to a target RNC/BSC in a Relocation Commit message.
8. A method as in claim 1, further comprising sending LCS parameters to the target RNC in a Forward SRNS Context message.

9. A method as in claim 5, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

10. A method as in claim 6, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

11. A method as in claim 7, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

12. A method as in claim 8, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

13. A method as in claim 1, wherein the message is sent before sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

14. A method as in claim 1, wherein the message is sent after sending a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

15. A wireless communications system having at least one mobile station for communicating with a network operator, comprising a controller in said mobile station, responsive to an occurrence of a RR procedure, including HO and CRS, that affects the mobile station, for determining if a location procedure is ongoing in the mobile station and, if it is, for completing the location procedure and for reporting measurement results in a message transmitted from the mobile station to a target radio network controller.

16. A system as in claim 15, wherein the location procedure is executed during a Combined Hard Handover and SRNS Relocation procedure for at least one of a PS or a CS domain, and applies to both intra-SGSN/MSC SRNS relocation and inter-SGSN/MSC and SRNS relocation.

17. A system as in claim 15, wherein the location procedure is executed during a Combined Cell/URA/GRA Update and SRNS Relocation procedure for a PS domain, and applies to both intra-SGSN SRNS relocation and for inter-SGSN SRNS relocation

18. A system as in claim 15, where the system sends LCS parameters from a source RNC/BSC to a target RNC/BSC.

19. A system as in claim 18, wherein the system sends LCS parameters in a transparent manner.

20. A system as in claim 18, wherein for a UTRAN case the system sends LCS parameters in a

Source RNC to Target RNC Transparent Container in a Relocation Required message.

21. A system as in claim 15, where the system sends LCS parameters from a source RNC/BSC to a target RNC/BSC in a Relocation Commit message.

22. A system as in claim 15, where LCS parameters are sent to a target RNC/BSC in a Forward SRNS Context message.

23. A system as in claim 19, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

24. A system as in claim 20, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

25. A system as in claim 21, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

26. A system as in claim 22, where the LCS parameters comprise at least one of:

a requested location accuracy;

a requested location response time;

details pertaining to a currently ongoing location process; and

a GMLC address.

27. A system as in claim 15, where the message is transmitted before transmitting a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.

28. A system as in claim 15, where the message is transmitted after transmitting a UTRAN Mobility Information Confirm message from the mobile station to the target RNC/BSC.